

Monopole: a monopole, as shown below, is a cylindrical, self supporting, aluminum or steel structure anywhere from 12 inches to 60 inches in diameter. The base of these poles is usually set in a concrete foundation some 20 feet deep and tapered from the base to the top which can be as high as 200 feet above the ground level. Triangular platforms like those shown below are attached to the pole to accommodate placement of the antennas. There are typically three rectangular panel type antennas attached to poles on each of the three sides of the platform, each serving a different sector of the service area . Monopoles are very strong and in Montgomery County, new monopoles are required to accommodate at least three carriers' antennas (to foster co-location on the monopole once erected). Monopoles can have as many as five sets of cellular antennas attached on them.



Self supporting lattice tower: self supporting lattice towers can be as tall as 500 feet above the ground. The construction of these towers uses three or four aluminum or steel legs interconnected with steel bars in a latticework appearance, tapering from a large base area to a small apex.



Guyed lattice tower: these lattice towers can be as high as 1500 feet tall and are supported by numerous guy wires anchored to the ground. These are more typically used for commercial broadcast radio and television transmission.



“Stealth sitings of antennas and towers: are also used to hide appearance of these facilities in the community: examples of concealed or camouflaged antenna structures are shown below.

“Tree” Monopole: the monopole pictured below has been disguised to look like a tree by attaching artificial branches made from material which will not interfere with the signals transmitted from the antennas which they conceal. The steel pole is treated with a material designed to look like bark as well. The “treepoles” shown are “X” ans “X” tall, one in a wooded setting A, another in a residential setting B



Flag pole monopole: the flagpole shown below is also made of “radio frequency friendly” material which permits signals to pass through it concealing the antennas beneath. The photo shows an approximately 100 ft tall monopole at a High School Football field. Photo B is a much shorter monopole mounted atop a drug store near a small commercial mall.



Antennas are also attached or co-located to existing structures already in the community such as water towers, electric utility transmission line towers, etc., where they may be inconspicuous to the casual observer.

